I. Rejection of Claims 1, 3, 6, 8, 10, 13, 15 and 19 under 35 U.S.C. §102

The Examiner has rejected Claims 1, 3, 6, 8, 10, 13, 15 and 19 under 35 U.S.C. §102(e) as being anticipated by U.S. Patent No. 6,044,266 to Hidenori Kato. As the Examiner is no doubt aware, anticipation requires that each and every element of the claimed invention be disclosed in a single prior art reference; the disclosed elements must either be disclosed expressly or inherently and must be arranged as in the rejected claims. Kato is directed to a mobile data station that monitors voice communications, identifies silent periods of the voice communications and transmits data packets during the silent periods. (Column 3, lines 15-19). More specifically, Kato discloses that a base station A engages in voice communications with a mobile voice station B through a call path D. The mobile data station C monitors the state of voice bursts being transmitted from the mobile voice station B through a burst monitor path E. The mobile data station C transmits data to the base station A through a packet transmission path F only when the voice burst monitor path E indicates that the call path D is silent. (FIG 1(a) and Column 4, lines 15-23).

In addition, a receiver section 1, within the mobile data station C, monitors a voice burst being transmitted from various mobile voice stations B to base station A, and measures the signal level of the voice bursts. (FIG 1(b) and Column 4, lines 26-31). Also within the mobile data station C, a channel monitor/control section 3 monitors the various channels available to a respective base station and when an ending voice burst is detected, the transmission of packets of data is commenced on that channel by activating the switch 5. The packets of data continue to be transmitted until a beginning voice burst signal is received. (FIG 1(b) and Column 5, lines 12-16). Kato also discloses a collision monitoring section 310 that detects whether an actual collision has occurred between the voice transmission and the data packet transmission. (Column 6, lines 36-39). When the collision

monitoring section 310 detects a collision, the collision monitoring section 310 then provides an output to a transmission request section 320 to control the switch 5 to stop transmitting the data packets to avoid further collisions. (Column 6, lines 50-54).

Kato does not disclose a system for use in communicating data over a voice channel between a transmitter and a receiver that includes a silence detector, coupled to the transmitter, that identifies a pause in voice traffic that is to be transmitted over the voice channel and generates an interjection signal during the pause as recited in Claim 1. Nor does Kato disclose a method of communicating data over a voice channel between a transmitter and a receiver that includes identifying a pause in voice traffic that is to be transmitted over the voice channel as recited in Claim 8. Kato merely discloses that the mobile data station C, a 3rd device external to the base station A and mobile voice station B, monitors the voice bursts being transmitted from the mobile voice station B in order to detect silence. (Column 4, lines 15-23). Kato does not identify a pause in voice traffic that is to be transmitted over a voice channel. Kato merely monitors transmitted voice traffic. Moreover, Kato cannot be monitoring voice traffic before it is transmitted because Kato explicitly states that it detects whether an actual collision has occurred between the voice transmission and the data packet transmission. (Column 6, lines 42-43). A collision only occurs when two or more transmissions occur at the same time or the transmissions overlap. A collision also means that there are two transmitters that are transmitting within the same time period. If Kato monitored voice traffic before it was transmitted, then no collision would occur since the same transmitter is transmitting the voice traffic and the data traffic. In addition, Kato does not disclose a silence detector that is coupled to a transmitter and identifies a pause in voice traffic that is to be transmitted over a voice channel to a receiver as recited in Claim 1. Kato merely discloses that within a mobile data station C a

receiver section 1 monitors a voice burst being transmitted from various mobile voice stations B to the base station A. (Column 4, lines 26-30). Thus, Kato's detection of voice bursts is in the receiver of Kato.

Kato also fails to disclose a cordless telephone that includes a base station transceiver, a handset transceiver, and a silence detector, coupled to a base station transceiver, that identifies a pause in voice traffic that is to be transmitted over a voice channel between the base station transceiver and the handset transceiver, and generates an interjection signal during the pause as recited in Claim 15. Kato merely discloses that system described for cellular telephone systems can be used for cordless telephone systems with VOX control. Kato further states that in cordless telephone systems, the first voice burst is lost by collision with a data packet, because the cordless telephone systems do not have preambles. (Column 8, lines 37-67). Since Kato states that the first voice burst is lost by collision with a data packet, Kato merely monitors voice traffic that has been transmitted. Kato does not identify a pause in voice traffic that is to be transmitted over a voice channel as recited in Claims 1, 8 and 15.

Therefore, Kato does not disclose each and every element of the claimed invention and as such, is not an anticipating reference. Because Claims 3 and 6 are dependent upon Claim 1, Kato also cannot be an anticipating reference for Claims 3 and 6. Because Claims 10 and 13 are dependent upon Claim 8, Kato also cannot be an anticipating reference for Claims 10 and 13. Because Claim 19 is dependent upon Claim 15, Kato also cannot be an anticipating reference for Claim 19. Accordingly, the Applicants respectfully request the Examiner to withdraw the §102 rejection with respect to these Claims.

II. Rejection of Claims 2, 4, 5, 7, 9, 11, 12, 14, 16-18 and 20 under 35 U.S.C. §103

The Examiner has rejected Claims 2, 9 and 16 under 35 U.S.C. §103(a) as being unpatentable over Kato in view of U.S. Patent No. 6,219,539 to Kalyan Basu, *et al.* ("Basu"). The Examiner has also rejected Claims 5, 12 and 18 under 35 U.S.C. §103(a) as being unpatentable over Kato in view of U.S. Patent No. 5,579,535 to Noah P. Orlen, *et al.* ("Orlen"). The Examiner has also rejected Claims 4, 11 and 17 under 35 U.S.C. §103(a) as being unpatentable over Kato in view of U.S. Patent No. 5,737,394 to Geoffrey T. Anderson, *et al.* ("Anderson"). In addition, the Examiner has rejected Claims 7, 14 and 20 under 35 U.S.C. §103(a) as being unpatentable over Kato in view of U.S. Patent No. 6,014,227 to Terence Edward Summer. The Applicants respectfully disagree.

With respect to Claims 2, 9 and 16, the Examiner has failed to establish a *prima facie* case of obviousness with respect to Kato in view of Basu. The Examiner has stated that Kato fails to disclose the voice traffic is analog voice traffic. (Examiner's Action, page 3). The Examiner has cited Basu for the premise that Basu discloses voice traffic that is analog voice traffic. The Examiner further stated that it would have been obvious to one skilled in the art to combine the teaching of Basu with Kato to develop the Applicants' claim inventions. (Examiner's Action, page 3). Basu, however, would defeat the teachings of Kato. More specifically, Kato states that each of the mobile voice stations B transmit an ending voice burst that is followed by a period of silence. (Column 4, lines 45-47). The ending voice burst is a post-amble that typically includes 448 bits, 224 bits of unique word PST0 and 224 bits of background noise generating information PST1. (Column 9, lines 44-52). Thus, the ending voice burst is digital information. Also, Kato monitors the channel for an ending voice burst and upon detection, Kato starts the data packet transmission. (Column 7, lines 42-50). The above cited passages in Kato indicate that Kato is specifically looking for an ending

voice burst on the voice traffic channel in order to start transmission of data packets, where the ending voice burst is digital information. If the voice traffic was changed to analog voice traffic, then no digital information indicating the ending voice burst could be sent, and, as such, would prevent Kato's invention from detecting a silence period. Therefore, Basu fails to provide the requisite motivation to develop the Applicants' claimed invention as recited in Claims 2, 9 and 16.

With respect to Claims 5, 12 and 18, the Examiner has failed to establish a *prima facie* case of obviousness with respect to Kato in view of Orlen. The Examiner has stated that Kato fails to disclose that said data comprises menu item selection data. (Examiner's Action, page 3). The Examiner has cited Orlen for the premise that Orlen discloses said data comprises menu item selection data. The Examiner further stated it would have been obvious to one skilled in the art to combine the teaching of Orlen with Kato to develop the Applicants' claimed inventions. (Examiner's Action, pages 3-4). As discussed above, Kato fails to teach or suggest all the elements of the inventions recited in independent Claims 1, 8 and 15. Orlen fails to cure the deficiencies of Kato and fails to teach or suggest, among other things, a system and method of communicating data over a voice channel between a transmitter and a receiver that includes identifying a pause in voice traffic that is to be transmitted over the voice channel as recited in Claims 1, 8 and 15. Orlen merely teaches a personal communication system that includes transceiver stations providing communication capability between one or more portable units and a wireless network, and the transceiver stations are capable of storing a data base and transmitting the same in response to a request for such information. (Column 1, lines 50-56). Since Orlen fails to cure the deficiencies of Kato and Kato fails to teach or suggest all of the elements of the inventions of Claims 1, 8 and 15, the Examiner cannot establish a *prima facie* case of obviousness of dependent Claims 5, 12 and 18, which include the elements of the

respective independent claims. The Applicants therefore respectfully traverse the Examiner's rejection of Claims 5, 12 and 18 under 35 U.S.C. §103.

With respect to Claims 4, 11 and 17, the Examiner has failed to establish a *prima facie* case of obviousness with respect to Kato in view of Anderson. The Examiner has stated that Kato fails to disclose that said data comprises caller identification data. (Examiner's Action, page 4). The Examiner has cited Anderson for the premise that Anderson discloses said data comprises caller identification data. The Examiner further stated it would have been obvious to one skilled in the art to combine the teaching of Anderson with Kato in order to recognize other party caller identification. (Examiner's Action, page 4). As discussed above, Kato fails to teach or suggest all the elements of the inventions recited in independent Claims 1, 8 and 15. Anderson fails to cure the deficiencies of Kato and fails to teach or suggest, among other things, a system and method of communicating data over a voice channel between a transmitter and a receiver that includes identifying a pause in voice traffic that is to be transmitted over the voice channel as recited in Claims 1, 8 and 15. Anderson merely teaches a telephone apparatus having a plurality of main functions, including a menu function with a plurality of associated functions. (Column 2, lines 6-10). Since Anderson fails to cure the deficiencies of Kato and Kato fails to teach or suggest all of the elements of the inventions of Claims 1, 8 and 15, the Examiner cannot establish a *prima facie* case of obviousness of dependent Claims 4, 11 and 17, which include the elements of the respective independent claims. The Applicants therefore respectfully traverse the Examiner's rejection of Claims 4, 11 and 17 under 35 U.S.C. §103.

With respect to Claims 7, 14 and 20, the Examiner has failed to establish a *prima facie* case of obviousness with respect to Kato in view of Summer. The Examiner has stated that Kato fails to disclose that said silence detector identifies said pause by comparing a peak energy of said voice

traffic to a noise floor reference. (Examiner's Action, page 4). The Examiner has cited Summer for the premise that Summer discloses said silence detector that identifies said pause by comparing a peak energy of said voice traffic to a noise floor reference. The Examiner further stated that it would have been obvious to one skilled in the art to combine the teaching of Summer with Kato to develop the Applicants' claimed inventions. (Examiner's Action, pages 4-5). As discussed above, Kato fails to teach or suggest all the elements of the inventions recited in independent Claims 1, 8 and 15. Summer fails to cure the deficiencies of Kato and fails to teach or suggest, among other things, a system and method of communicating data over a voice channel between a transmitter and a receiver that includes identifying a pause in voice traffic that is to be transmitted over the voice channel as recited in Claims 1, 8 and 15. Summer merely teaches a receiver for receiving a modified voice message that includes a modified silent portion having a transmission duration. Summer also includes a processing system coupled to the receiver for processing the modified voice message to detect the modified silent portion and to measure the transmission duration. (Column 1, line 66, through Column 2, line 4). Since Summer fails to cure the deficiencies of Kato and Kato fails to teach or suggest all of the elements of the inventions of Claims 1, 8 and 15, the Examiner cannot establish a *prima facie* case of obviousness of dependent Claims 7, 14 and 20, which include the elements of the respective independent claims. The Applicants therefore respectfully traverse the Examiner's rejection of Claims 7, 14 and 20 under 35 U.S.C. §103.

Kato, individually or in combination with Basu, Orlen, Anderson and Summer, fails to teach or suggest the invention recited in independent Claims 1, 8 and 15 and their dependent claims, when considered as a whole. Claims 2, 4, 5, 7, 9, 11, 12, 14, 16-18 and 20 are therefore not obvious in view of Kato, Basu, Orlen, Anderson and Summer.

In view of the foregoing remarks, the cited references do not support the Examiner's rejection of Claims 2, 4, 5, 7, 9, 11, 12, 14, 16-18 and 20 under 35 U.S.C. §103(a). The Applicants therefore respectfully request the Examiner withdraw the rejection.

IV. Conclusion

In view of the foregoing amendment and remarks, the Applicants now see all of the Claims currently pending in this application to be in condition for allowance and therefore earnestly solicit a Notice of Allowance for Claims 1-20.

The Applicants request the Examiner to telephone the undersigned attorney of record at (972) 480-8800 if such would further or expedite the prosecution of the present application.

Respectfully submitted,

HITT GAINES & BOISBRUN, P.C.

/Mark E. Kelley/

Mark E. Kelley
Registration No. 45,857

Dated: 8/15/2007

P.O. Box 832570
Richardson, Texas 75083
(972) 480-8800